

REMARKS

Entry of the foregoing amendments, and reexamination and reconsideration of the subject application, pursuant to and consistent with 37 C.F.R. § 1.104 and § 1.112, and in light of the following remarks, are respectfully requested.

Amendments

Claim 1 has been amended to replace the unintentionally omitted limitation regarding the average transmittance for visible rays.

Rejection under 35 U.S.C. §112, first paragraph

The rejection, as set forth in the previous final rejection and the advisory action, does not explain why the specification does not "reasonably convey[] to the artisan that the inventor had possession at that time of the later claimed subject matter, rather than the presence or absence of literal support in the specification for the claim language." *In re Kaslow*, 707 F.2d 1366, 1375, 217 USPQ 1089 (Fed. Cir. 1983). The statements by the Office that the specification is enabling only for the specific combinations of these parameters shown in the examples is contrary to law. *Union Oil Co. of Cal. v. Atlantic Richfield Co.*, 208 F.3d 989, 997, 54 USPQ2d 1227, 1232 (Fed. Cir. 2000) ("The written description requirement does not require the applicant 'to describe exactly the subject matter claimed, [instead] the description must clearly allow persons of ordinary skill in the art to recognize that [he or she] invented what is claimed'" (citation omitted); *Vas-Cath Inc. v. Mahurkar*, 935 F.2d 1555, 1563, 19 USPQ2d 1111, 1116 (Fed. Cir. 1991) ("[T]he test for sufficiency of support ... is whether the disclosure of the application relied upon 'reasonably conveys to the artisan that the inventor had possession at that time of the later claimed subject matter.'" (quoting *Ralston Purina Co. v. Far-Mar-Co, Inc.*, 772 F.2d 1570, 1575, 227 USPQ 177, 179 (Fed. Cir. 1985))).

It is clear that light impinging the claimed article is transmitted through, absorbed, or reflected from the article. As argued previously, if the specification explicitly discloses transmission of 60%, then 40% is a combination of what is

absorbed and what is reflected, and the specification provides reflectance values of 12% and 19% and 15%. The Office has never explained why the specification does not "reasonably convey" to one of ordinary skill in the art possession of a glass having reflectance values between 12% and 19%, or about 15%, other than to maintain that the "examples provide[] support only for values that exactly correspond to the data." That standard is clearly contrary to what is required by the Office. (See MPEP 2163(1)(B)(II), last paragraph, citing *Vas-Cath, Inc.*) If the rejection is alleging that "about" would be considered by one of ordinary skill in the art to be narrower than 7% (from 12% to 19%), it does not list that as basis for the rejection.

To satisfy the description requirement of section 112, first paragraph, an application must contain sufficient disclosure, expressly or inherently, to make it clear to one skilled in the art that the appellant was in possession of the subject matter claimed. "[A] statement of appellant's invention [in his specification] which is as broad as appellant's broadest claims" is sufficient to meet this requirement.

In re Eickmeyer, 602 F2d 974, 202 USPQ 655, 662 (CCPA 1979) (citations omitted, underline added). Because claims 11 and 12 are as broad as the disclosure, applicant's specification thus supports "about 15%" for visible light reflectance as recited in original claim 7, or "about 12%-19%", as previously claimed with the endpoints shown in the examples, if not both. Because original claim 7 contains this specific limitation (MPEP 2163(II)(A)), and the rejection is improperly based on connecting the claim limitation to the data in the examples, this rejection should now be withdrawn, and if maintained should be clarified as to why disclosure of the 12% and 19% endpoints in the examples, and an "average reflectance of 15% or less for visible rays" in original claim 7, does not show possession in compliance with §112, first paragraph.

Rejections under 35 U.S.C. §103

The rejections of claims 1, 2, 4, 6, and 8-12 as obvious over a combination of eight patents is respectfully traversed.

None of the cited references disclose the sputtering temperature for applying the oxide coating. Only applicant discloses any specific temperature at which the oxide coating is applied (350° C; specification Example 1 at page 5, last line, regarding sputtering, and 600° C in Example 2 regarding spraying; sputtering and spraying are also disclosed at the last line of page three).

The rejection essentially argues it would be obvious to modify the various teachings of the references to arrive at what applicants have claimed, but without showing any motivation or suggestion that the *specific values* recited in the rejected claims are within the consideration or motivation of the art.

Stephens is directed to keeping solar radiation out of buildings (col. 2, ln. 48-66). The examples and specification refer to a "solar control" film. This reference accordingly teaches nothing about fire protection.

Hentzelt discloses a *metallic* reflective coating, such as gold (or Al, Cu, Ag, Pd) rather the claimed oxide layer. This is not a "metal-doped" oxide layer but a pure metal layer, and so Hentzelt teaches away from using an oxide layer without a metal layer. (An oxide layer can be used alone as an "interference filter", lines 25-30 of col. 3.) The oxide layers in Hentzelt where the rejection cites, to lines 38-47, are for "infra-red radiation having longer wavelengths, say 3 μ m and above." In the non-preferred embodiments, the oxides disclosed by Hentzelt do not include indium, tin, or antimony (col. 3, ln. 33-34). Accordingly, Hentzelt teaches away from the present invention.

Arfsten (*et al.*) provides values only for 9.5 μ m (9500 nm; tables at cols. 2, 6, and 8). This reference is also directed to solar energy (col. 1, ln. 15-43).

Benson (*et al.*) is also directed to solar radiation (see background section).

Plumat (*et al.*) discloses values significantly less than claimed. Applicants' claims 1 and 8 recite that 70% of IR at 2.5 μ m is reflected, whereas this reference discloses reflectance at the wavelength of only 36% for tin oxide (Example 2), or 30% at 2.0 μ m (Ex. 11); gold (Ex. 3) reflected 90% of those rays (see also Al and Cu in Exs. 9 and 10). The "consisting essentially of" language in applicants' claimed composition excludes a metal layer.

Terneu (*et al.*) is likewise directed to thermally insulating buildings and solar screening (see background section and col. 4, ln. 24-52). The example

data shows that Terneu is also concerned with total heat transfer through the window, and not containing fire-starting radiation within the flame-engulfed area.

Friedman (*et al.*) requires THV, “a thermoplastic elastic copolymer” that is not equivalent and does not “correspond” to the polymers recited in the rejected claims. This reference provides no indication that the claimed values can be achieved without the required THV material, a result that would not have been obvious given the teachings of this reference.

None of the references describes the claimed reflectances and wavelengths.

The rejection seems based on an “obvious to try” rationale, that the claimed oxides are known to provide some blocking of IR radiation and so it would have been obvious to arrive at the claimed structure. Yet none of the references teach the claimed values, and all of those references concerned with solar radiation are concerned with much longer wavelengths. The only motivation comes from applicants’ disclosure. *In re Gordon*, 733 F.2d 900, 902, 221 USPQ 1125, 1127 (Fed. Cir. 1984) (mere fact that prior art device could have been modified does not make modification obvious unless prior art suggested desirability of modification) There is no inherent motivation to modify the art absent some suggestion, like noting deficiencies in shielding the wavelengths recited by applicants, but that disclosure does not exist in the cited references.

A suggestion by the Office why it might be obvious to try something is inappropriate because the motivation must come from the cited reference(s), *In re Yates*, 211 USPQ 1149, 1151 (CCPA 1981), not from applicants. The secondary references disclosing oxide layers are concerned with solar radiation, not fire protection, and those concerned with fire protection teach a clear advantage to using metal rather than an oxide, and none of the oxides in Hentzelt are those recited in the claims. Friedman, in fact, has no disclosure of using oxides, at all; not even in the claims. Friedman is concerned with the impact resistance (Ex. 1) and haze (optical properties at col. 3, ln. 28-38, and Exs. 5-11). The combination of references, even if proper, does not lead one of ordinary skill in the art to what is recited in the claims, and so the rejections should be withdrawn.